

**SECTION 20. PARTICULATE EMISSIONS - LIMITATIONS AND STANDARDS**

(For exceptions due to breakdowns or scheduled maintenance: See Section 35 of these Regulations and Standards)

- (A) No person shall cause, suffer, allow or permit the emission of particulates from any processing machine, equipment, device or other articles, or combination thereof, except indirect heating equipment, incinerators and coatings bake off ovens (burn-off furnaces), in excess of the amounts allowed in Table 20-1 during any one hour.
- (1) Coatings bake off ovens (burn-off furnaces) shall comply with the following requirements:
- (a) Particulate matter discharged into the outdoor atmosphere shall not exceed 0.1 grains per dry standard cubic foot (gr/dscf) of exhaust gas, corrected to 12% carbon dioxide.
  - (b) The oven's secondary combustion chamber shall be equipped with an auxiliary burner(s) capable of heating and maintaining the combustion in this chamber at a minimum temperature of 1,200°F. The burner(s) shall be interlocked with operation of the primary combustion chamber so that the oven can not be operated unless the secondary combustion chamber burner(s) is functioning.
- (B) No person shall cause or allow particulate matter caused by the combustion of fuel to be emitted from any stack or chimney into the outdoor atmosphere in excess of the hourly rate set forth in the following table:

Total Heat Input in Million British Thermal Units Per Hour	Maximum Allowable Emissions of Particulate Matter in Pounds per Million British Thermal Units
10 or less	0.60
10,000 or more	0.12

- (C) The allowable emission rate for equipment having immediate heat input between 10 (10<sup>6</sup>) BTU and 10,000 (10<sup>6</sup>) BTU may be determined by the formula:

$$A = \frac{1.026}{I^{.233}}$$

A = The allowable emission rate in Lb/10<sup>6</sup> BTU

I = The total heat input in 10<sup>6</sup> BTU/Hr

- (D) For the purpose of these Regulations and Standards, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack, or the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel burning units at a plant or on a premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.
- (E) No person shall cause or allow emissions from any existing source, which are of an opacity equal to or greater than twenty percent (20%), as evaluated by an EPA approved method, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B except as provided for in paragraph (F) of this Section.

Table 20-1

Process	Process	Allowable		Process	Allowable
Weight	Weight	Rate of	Process	Weight	Rate of
Rate	Rate	Emission	Weight Rate	Rate	Emission
Lb/Hr	Tons/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr
100	0.05	0.551	16,000	8.000	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10.	19.2
600	0.30	1.83	30,000	15.	25.2
800	0.40	2.22	40,000	20.	30.5
1,000	0.50	2.58	50,000	25.	35.4
1,500	0.75	3.38	60,000	30.	40.0
2,000	1.00	4.10	70,000	35.	41.3
2,500	1.25	4.76	80,000	40.	42.5
3,000	1.50	5.38	90,000	45.	43.6
3,500	1.75	5.96	100,000	50.	44.6
4,000	2.0	6.52	120,000	60.	46.3
5,000	2.50	7.58	140,000	70	47.8
6,000	3.0	8.56	160,000	80.	49.0
7,000	3.5	9.49	200,000	100.	51.2
8,000	4.00	10.4	1,000,000	500.	69.0
9,000	4.50	11.2	2,000,000	1,000	77.6
10,000	5.00	12.0	6,000,000	3,000	92.7
12,000	6.00	13.6			

Interpolation of the data in this table for process weight rates up to 60,000 Lb/Hr shall be accomplished by use of the equation  $E = 4.10p^{.67}$  and interpolation and extrapolation of the data for process weight rates in excess of 60,000 Lb/Hr shall be accomplished by use of the equation  $E = 55.0p^{.11-40}$ , where E = rate of emission in Lb/Hr and P = process weight rate in Tons/Hr. If two or more units discharge into a single stack, the allowable emission rate will be determined by the sum of all process weights discharge into the single stack.

(F) Exceptions:

- (1) Emission sources subject to monitoring requirements of Section 34, paragraph (E) of these Regulations and Standards are allowed to have one six minute period per hour of not more than 27 percent opacity.

(G) All sources shall comply with paragraph (E) of this Section unless a more stringent opacity standard applies as specified elsewhere in these Regulations and Standards.

Ref: Title 129, Chapter 20, Nebraska Department of Environmental Quality